

ABSTRACT OF THE DISCLOSURE

An X-ray CT (computed tomography) apparatus is disclosed. The X-ray CT apparatus include an X-ray supply unit performing low-dose X-ray scans and high-dose X-ray scans for a patient in which a contrast medium has been injected. The collected X-ray projection data are reconstructed to generate image data for low-dose scans and high-dose scans. In the low-dose scans that precede the high-dose scans, plural images are obtained in succession, in which ROIs (regions of interest) are set in given positions. A CT value calculating unit calculates the CT values in the ROIs in succession, and the calculated CT values are displayed as a time-density curve (TDC). The operator observes the state in which the contrast medium flows into the ROIs, and determines the timing at which the high-dose X-ray scan is started.